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SHEET 1 of 5

COMPLETE IF KNOWN	
Application Number	09/777,989
Confirmation Number	3218
Filing Date	6 February 2001
First Named Inventor	Chester
Group Art Unit	~~2123~~ 2857
Examiner Name	~~unknown~~ Washburn
Attorney Docket Number	8035M

U. S. PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No.[1]	U.S. PATENT DOCUMENT Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No.[1]	FOREIGN PATENT DOCUMENT Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T[6]

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EXAMINER INITIALS*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[6]
JW	1	R.D. SMITH, E.G. CHAPMAN, AND B.W. WRIGHT, "Pressure Programming in Supercritical Fluid Chromatography," Analytical Chemistry, 57: (14) pp. 2829-2836 (1985)	
JW	2	H. SNIJDERS, H.G. JANSSEN, AND C. CRAMERS, "Optimization of termperature-programmed gas chromatographic separations. 1. Prediction of retention times and peak widths from retention indices," Journal of Chromatography A, 718: (2) pp. 339-355 (Dec. 22, 1995)	
JW	3	J.C. GIDDINGS, Unified Separation Science, John Wiley & Sons, Inc. New York (1991)	
JW	4	R.G. WOLCOTT, J.W. DOLAN, AND L.R. SNYDER, "Computer simulation for the convenient optimization of isocratic reversed-phase liquid chromatographic separations by varying temperature and mobile phase strength," Journal of Chromatography A, 869, pp. 3-25 (2000)	
JW	5	L.R. SNYDER, J.W. DOLAN, AND J.R. GRANT, J. Chromatogr., 165, (1979) 3	
JW	6	P.J. SCHOENMAKERS, "Optimization of Chromatographic Selectivity, a Guide to Method Development," J. Chromatography Library, 35 (1986) pp. 1-36	
JW	7	H. MARTENS AND T. NAES, Multivariate Calibration, ISBN 0-471-90979-3, John Wiley & Sons, Ltd., Chichester (1989) pp. 261-273, 292-356	
JW	8	R. PERSON, Special Edition Using Excel for Windows 95, QUE, Ch. 29, pp. 838-853. Not Cited	

Examiner K.R. Williams Date Considered 4-19-06

OIPE
JUL 23 2001
PATENT & TRADEMARK OFFICE
RECEIVED
JUL 23 2001
Technology Center 2100

	9	E. J. BILLO, Excel for Chemists: A Comprehensive Guide, Wiley-VCH, New York, Ch. 17, pp. 287-300 (1997)	
	10	E. BAUMER ET AL., Special Edition Using Microsoft Excel 2000, QUE, Ch. 22, pp. 646-659 (1998)	
	11	L.R. SNIDER, J.J. KIRKLAND, J.L. GLAJCH, Practical HPLC Method Development, 2nd ed., Wiley, p. 392-394 and pp. 439-478 (1997)	
	12	ATWOOD AND GOLAY, J. Chromatogr., 218, pp. 97-122 (1981)	
	13	J.J. VAN DEEMTER, F.J. ZUIDERWEG, AND KLINKENBERG, Chem. Eng. Sci., 5, 271, (1956), pp. 271-289	
	14	C. HORVATH AND H.J. LIN, J. Chromatogr. Sci., 149, 43, (1978), pp. 43-70	
	15	G.J. KENNEDY, AND J.H. KNOX, J. Chromatogr. Sci., 10, 149, (1972), pp. 549-556	
	16	B.F. KARGER, L.R. SNYDER, AND C. HORVATH, An Introduction to Separation Science, John Wiley & Sons, New York, P. 90 (1973), pp. ix-xiii, 63, 90-95	
	17	P.E. KAVANAGH, "Optimizing Reversed Phase Separations with the Aid of a Spreadsheet," Chromatographia, Vol. 50, No. 1/2, July, 1999, pp. 65-69 ISSN: 0009-5893	
	18	L. PAUGAM, R. MENARD, J. LAURE, D. THOUVENOT, "Optimization of glucosinolate separation by micellar electrokinetic capillary chromatography using a Doehlert's experimental design," J. Chromatography A, 864 (1999) 155-162	
	19	E. MARENGO, M.C. GENNARO, V. GIANOTTI, E. PRENESTI, "Optimization of the separation of mono- and dichloroanilines in ion interaction high performance liquid chromatography," J. Chromatography A, 863, (1999) 1-11	
	20	A.I. LIAPIS, J.J. MEYERS, O.K. CROSSER, "Modeling and simulation of the dynamic behavior of monoliths Effects of pore structure from pore network model analysis and comparison with columns packed with porous spherical particles," J. Chromatography A, 865 (1999) 13-25	
	21	G. DESMET, G.V. BARON, "Simultaneous optimization of the analysis time and the concentration detectability in open tubular liquid chromatography," J. Chromatography A, 867 (2000) 23-43	
	22	S. GOGA-REMONT, S. HEINISCH, J.L. ROCCA, "Use of optimization software to determine rugged analysis conditions in high-performance liquid chromatography," J. Chromatography A, 868 (2000) 13-29	
	23	R. BERGES, V. SANZ-NEBOT, J. BARBOSA, "Modelling retention in liquid chromatography as a function of solvent composition and pH of the mobile phase," J. Chromatography A, 869 (2000) 27-39	
	24	C. BARBAS, A. GARCIA, L. SAAVEDRA, M. CASTRO, "Optimization and validation of a method for the determination of caffeine, 8-chlorotheophylline and diphenhydramine by isocratic high-performance liquid chromatography Stress test for stability evaluation," J. Chromatography A, 870, (2000) 97-103	
	25	R. ROMERO, D. GAZQUEZ, M.G. BAGUR, M. SANCHEZ-VINAS, "Optimization of chromatographic parameters for the determination of biogenic amines in wines by reversed-phase high-performance liquid chromatography," J. Chromatography A, 871 (2000) 75-83	
	26	V. NATARAJAN, B. W. BEQUETTE, S. M. CRAMER, "Optimization of ion-exchange displacement separations I. Validation of an iterative scheme and its use as a methods development tool," J. Chromatography A, 876 (2000) 51-62	
	27	V. NATARAJAN, S.M. CRAMER, "Optimization of ion-exchange displacement separations II. Comparison of displacement separations on various ion-exchange resins," J. Chromatography A, 876 (2000) 63-73	
	28	V. PIETTE, M. LAMMERHOFER, K. BISCHOFF, W. LINDNER, "High-performance liquid chromatographic enantioseparation of N-protected alpha amino acids using nonporous silica modified by a quinine carbamate as chiral stationary phase," Lab of Analytical Chemistry, University of Namur, Namur, Belg. Chirality (1997), 9(2), 157-161 ISSN: 0899-0042	
	29	N. HAMADA, H. MURAKITA, T. FUJITA, "Computer application for the optimization of resolution in HPLC," Kuromatogurafi, (1995) 16(4), 278-9 ISSN: 0917-3048 (Abst-art only translated)	
	30	J.D. STUART, D.D. LISI, L.R. SNYDER, "Separation of Mixtures of o-phthalaldehyde-derivatized amino acids by reversed-phase gradient elution. Accuracy of computer simulation for predicting retention and band width," J. Chromatogr., (1989) 485, 657-72 ISSN: 0021-9673	
	31	J.W. DOLAN, ET AL., "Simultaneous variation of temperature and gradient steepness for reversed-phase high-performance liquid chromatography method development I. Application to 14 different samples using computer simulation," J. Chromatogr. A, (1998) 803(1 + 2), 1-31 ISSN: 0021-9673	
	32	M. LAEMMERHOFER, ET AL., "Computerized optimization of the high-performance liquid chromatographic enantioseparation of a mixture of 4-dinitrophenyl amino acids on a quinine carbamate-type chiral stationary phase using DRYLAB," J. Chromatogr. B: Biometd. Appl. (1997) 689(1), 123-135 ISSN: 0378-4347	
	33	T.H. DZIDO, A. SORY, "Computer optimzation for RP-HPLC separation of some nucleosides," Chem. Anal. (Warsaw) (1996), 41(1), 113-120 ISSN:0009-2223	
	34	R. DAEPPEN, I. MOLNAR, "Application of the gradient elution technique: demonstration with a special test mixture and the DryLab G/plus method development software," J. Chromatogr. (1992), 592(1-2), 133-141 ISSN: 0021-9673	

Examiner Joel Weinstein Date considered 4-19-06

PATENT & TRADEMARK OFFICE
JUL 23 2001
RECEIVED
JUL 25 2001
Technology Center 2100

	35	R.C. [illegible]OUPEK, [illegible]S. HANCOCK, L.R. SNYDER, "Computer simulation as a tool for the rapid optimization of high-performance liqid chromatographic separation of a tryptic digest of human growth hormone," J. Chromatogr. (1992), 594(1-2), 65-73 ISSN: 0021-9673
	36	P.A. RYAN, B.A. EWELS, J.L. GLAJCH, "Separation and detection of oxidation products in Neurolite raw material," J. Chromatogr. (1991), 550(1-2), 549-558 ISSN: 0021-9673
	37	T.H. DZIDO, E. SOCZEWINSKI, J. GUDEJ, "Computer aided optimization of high-performance liquid chromatographic analysis of flavonoids from some species of the genus Althaea," J. Chromatogr. (1991) 550(1-2), 71-6 ISSN: 0021-9673
	38	J. FULPER, "Practical approach for high-performance liquid chromatographic method development: assaying synthetic intermediates of a leukotrinene inhibitor," J. Chromatogr. (1989), 485, 597-605 ISSN: 0021-9673
	39	P.B. BOWMAN, ET AL., "Liquid chromatography solvent optimization: potential pitfalls when using a black box for developing a quality separation," J. Pharm. Biomed. Anal., (1993), 11(11-12), 1295-1301 ISSN: 0731-7085
	40	R. FAULSTICH, T. CATALANO, "Interactive computer optimization of high performance liquid chromatography separations in pharmaceutical analysis," LC-GC, (1991), 9(11), 776, 778-779 ISSN: 0888-9090
	41	P.B. BOWMAN, ET AL., "Automated HPLC optimization-not all systems are the same," J. Pharm. Biomed. Anal. (1993), 11(11-12), 1303-15 ISSN: 0731-7085
	42	K. OUTINEN, V.M. LEHTOLA, H. VUORELA, "Behavior of resolution by changing solvent strength and selectivity in the 'PRISMA' model using reversed-phase HPLC for biogenic amines," J. Pharm. Biomed. Anal. (1997), 15(6), 819-829 ISSN: 0731-7085
	43	K. OUTINEN, ET AL., "Optimization of selectivity in high-performance liquid chromatography using desirability functions and mixture designs according to prisma," Eur. J. Pharm. Sci. (1998), 6(3), 197-205 ISSN: 0928-0987
	44	K. OUTINEN, H. VUORELA, R. HILTUNEN, "The retention behavior of biogenic amines in the 'PRISMA' model using reversed-phase HPLC," Acta Pharm. Fenn. (1992), 101(1), 11-20 ISSN: 0356-3456
	45	S. NYIREDY, W. WOSNICK, H. THIELE, O. STICHER, "'PRISMA' model for computer-aided HPLC mobile phase optimization based on an automatic peak identification approach," J. Liq. Chromatogr. (1991), 14(16-17), 3077-3110 ISSN: 0148-3919
	46	C. GEIGER, H. RIMPLER, "'OPTISOLVE' – a PC-program for solvent optimization in liquid chromatography. Part 1," GIT Fachz. Lab. (1990), 34(11), 1391-2, 1395-7 ISSN: 0016-3538. Only Summary Translated
	47	S.J. ZIEGLER, O. STICHER, "Optimization of the mobile phase for HPLC separation of S-alk(en)yl-L-cysteine derivataives and their corresponding sulfoxide isomers," J. Liq. Chromatogr. (1989), 12(1-2), 199-220 ISSN: 0148-3919
	48	R. CELA, ET AL., "PREOPT-W: off-line optimization of binary gradient separations in HPLC by simulation – IV. Phase 3," Comput. Chem. (1996), 20(3), 315-330 ISSN: 0097-8485
	49	R. CELA, M. LORES, "PREOPT-W: a simulation program for off-line optimization of binary gradient separations in HPLC – II. Data management and miscellaneous aspects of use," Comput. Chem. (1996), 20(2), 193-202 ISSN: 0097-8485
	50	R. CELA, ET AL., "The PREOPT package for pre-optimization of gradient elutions in high-performance liquid chromatography," Anal. Chim. Acta (1986), 191, 283-297 ISSN: 0003-2670
	51	R. CELA, M. LORES, "PREOPT-W: a simulation program for off-line optimization of binary gradient separations in HPLC – I. Fundamentals and overview," Comput. Chem. (1996), 20(2), 175-91 ISSN: 0097-8485
	52	S.D. PATTERSON, "Use of solvent selectivity optimization procedures for high-performance liquid chromatographic method development," J. Chromatogr. (1992), 592(1-2), 43-9 ISSN: 0021-9673
	53	M. SOLFRIZZO, ET AL., "Separation of chlamydosporol epimers by reversed-phase HPLC using commercial solvent optimization software," Chromatographia, (1994) 39(7/8), 443-7 ISSN: 0009-5893
	54	G. D'AGOSTINO, ET AL., "Optimization of the mobile phase composition in gradient elution reversed-phase HPLC by stochastic prediction," Chromatographia, (1988) 25(4), 343-9 ISSN: 0009-5893
	55	K. LEMR, "Computerized optimization of the mobile phase in RP-HPLC," Chem. Listy (1992), 86(11), 850-4 ISSN: 0009-2770. Only one paragraph Translated
	56	P. JAGELAND, ET AL., "Optimization of industrial-scale high-performance liquid chromatography applications using a newly developed software," J. Chromatogr. (1994), 658(2), 497-504 ISSN: 0021-9673
	57	C. BRYANT, ET AL., "Using inductive logic programming to discover knowledge hidden in chemical data," Chemom. Intell. Lab. Syst. (1997), 36(2), 111-123 ISSN: 0169-7439
	58	S. HEINISCH, ET AL., "Computerized optimization of RP-HPLC separation with nonaqueous or partially aqueous mobile phases," Chromatographia, (1997), 44 (9/10), 529-537 ISSN: 0009-5893
	59	B. BOURGUIGNON, ET AL., "CRISEBOOK, a Hypermedia version of an expert system for the selection of optimization criteria in high-performance liquid chromatography," J. Chromatogr. (1992), 592(1-2), 51-7 ISSN: 0021-9673

Examiner [signature] Date considered 9-19-06

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RECEIVED JUL 25 2001 Technology Center 2100

W	60	J. MARTINEZ-MADRID, ET AL., "A new sequential procedure for the efficient and automated location of optimum conditions in high performance liquid chromatography (HPLC)," J. Liq. Chromatogr., (1995), 18(15), 2969-83 ISSN: 0148-3919	
W	61	C.T. MANT, ET AL., "Reversed-phase chromatographic method development for peptide separations using the computer simulation program ProDigest-LC," J. Chromatogr., (1989), 485, 365-82 ISSN: 0021-9673	
W	62	R.S. HODGES, ET AL., "Computer simulation of high-performance liquid chromatographic separations of peptide and protein digests for development of size-exclusion, ion-exchange, and reversed-phase chromatographic methods," J. Chromatogr., (1988), 458, 147-67 ISSN: 0021-9673	
W	63	S.G. LISSETER, "A PASCAL program for the optimization of ternary mobile phases for reversed-phase high performance liquid chromatography," Lab. Microcomput, (1990), 9(4), 109-15 ISSN: 0262-2955	
W	64	J. WEI, J. WEI, X. ZHOU, "Computer-aided optimization of the experimental conditions for the isocratic reversed-phase high-performance liquid chromatographic separation of hormonal steroids," J. Chromatogr. (1991), 552(1-2), 103-11 ISSN: 0021-9673	
W	65	J. WEI, J. WEI, X. ZHOU, "Optimization of an isocratic reversed phase liquid chromatographic system for the separation of fourteen steroids using factorial design and computer simulation," Biomed. Chromatogr. (1990), 4(1), 34-8 ISSN: 0269-3879	
MW	66	A.G. WRIGHT, A.F. FELL, J.C. BERRIDGE, "Computer-aided optimization with photodiode array detection in HPLC," Anal. Proc. (London) (1988), 25(9), 300-3 ISSN: 0144-557X	
W	67	T. O'DWYER, P. DELAND, R. SMITH, "Optimization of HPLC separations through distributed intelligence using a PC," Am. Lab. (Fairfield, Conn.) (1988), 20(6), 40, 42-4, 46-8, ISSN: 0044-7749	
MW	68	A.G. WRIGHT, A.F. FELL, J.C. BERRIDGE, "Sequential simplex optimization and multichannel detection in HPLC: application to method development," Chromatographia, (1987), 24, 533-40, ISSN: 0009-5893	
W	69	R. ANDERSSON, M.D. HAEMAELAEINEN, "Simplex focusing of retention times and latent variable projections of chromatographic profiles," Chemom. Intell. Lab. Syst. (1994), 22(1), 49-61 ISSN: 0169-7439	
W	70	A.G. WRIGHT, A.F. FELL, J.C. BERRIDGE, "Strategies for automated optimization of high-performance liquid chromatographic separations incorporating diode-array detection," J. Chromatogr. (1988), 458, 335-53 ISSN: 0021-9673	
W	71	O. BUSTO, J.C. OLUCHA, F. BORRULL, "Determination of phenolic compounds in water by HPLC by linear gradient. An optimized method.," Chromatographia, (1991), 32(9-10), 423-8 ISSN: 0009-5893	
MW	72	R.P. TUCKER, ET AL., "Computer-aided models for optimization of eluent parameters in chiral liquid chromatography," Chirality, (1992) 4(5), 316-22 ISSN: 0899-0042	
W	73	H. J. METTING, P. M. COENEGRACHT, M. J. PIERRE, "Neural networks in high-performance liquid chromatography optimization: response surface modeling," J. Chromatogr. A, (1996), 728(1 + 2), 47-53 ISSN: 0021-9673	
W	74	E.P. LANKMAYR, ET AL., "Computer-aided optimization of high-performance liquid chromatography in the pharmaceutical industry," J. Chromatogr. (1989), 485, 183-93 ISSN: 0021-9673	
W	75	C. P. ONG, ET AL., "Use of overlapping resolution mapping scheme for optimization of the high-performance liquid chromatographic separation of pharmaceuticals," J. Chromatogr. A, (1995), 692(1 + 2), 207-12	
	76	~~S. FAN, ET AL., "Optimization of reversed-phase liquid chromatographic separation of aromatic acids," Sepu (1988), 6(4), 229-2~~	
MW	77	O.A. QUATTROCCHI, L. IMPERIALE, "Optimization of HPLC methods," SAFYBI (1991), 31(84), 37-60 ISSN: 0558-1265, Only Abstract Found & Ref.	
	~~78~~	~~W. YUAN, ET AL., "An automatic optimization procedure in multistage gradient elution," Sepu (1985), 2(6), 335-8~~	
	~~79~~	~~C. ZHOU, ET AL., "Optimization of the composition of a binary mobile phase in RP-HPLC by computer statistical mapping procedure," Fenxi Ceshi Tongbao (1990), 9(2), 52-6 ISSN: 1000-3800~~	
W	80	D. BYLUND, ET AL., "Optimization of chromatographic separations by use of a chromatographic response function, empirical modeling, and multivariate analysis," Chromatographia, (1997), 44(1/2), 74-80 ISSN: 0009-5893	
	81	~~H. MO, B. DENG, "Optimization of separation conditions for mixtures of phenols by high-performance liquid chromatography using artificial neural network," Fenxi Huaxue (1995), 23(7), 779-82 ISSN: 0253-3820~~	
	82	~~R. LYNCH, ET AL., "Solvent optimization system for HPLC applications," LaborPraxis (1990), 14(12), 1028, 1030-2 ISSN: 0344-1733~~	
W	83	F. GONG, ET AL., "An improved algorithm of sequential number-theoretic optimization (SNTO) based on clustering technique," Chemom. Intell. Lab. Syst. (1999), 45(1,2), 339-346 ISSN: 0169-7439	
W	84	P. CHAMINADE, ET AL., "Use of the cubic spline interpolation algorithm for the selection of optimal ternary mobile phase composition in RP-HPLC," Analusis (1994) 22(2), 55-7 ISSN: 0365-4877	
W	85	B. BOURGUIGNON, ET AL., "Optimization in irregularly shaped regions: pH and solvent strength in reversed-phase high-performance liquid chromatography separations," Anal. Chem. (1994), 66(6), 893-904 ISSN: 0003-2700	

Examiner Initial Date Considered 4-20-06

JUL 23 2001
PATENT & TRADEMARK OFFICE
RECEIVED
JUL 23 2001
Technology Center 2100

	86	P.F. DE AGUIAR, ET AL., "Comparison of models and designs for optimization of the pH and solvent strength in HPLC," Anal. Chim. Acta, (1997) 356(1), 7-18 ISSN: 0003-2670
	87	C. GERTZ, W. FELLMANN, "Simple procedure for optimizing multicomponent mobile phases in high-performance liquid chromatography," Fresenius' Z. Anal. Chem. (1986) 323(4), 343-9 ISSN: 0016-1152. (Only Abstract Available)
	88	Q. WANG, R. GAO, B. YAN, "Integration of computer-assisted statistical scanning optimization system in HPLC," Chin. J. Chem. (1996), 14(1) 40-7 ISSN: 1001-604X
	89	B.A. OLSEN, M.D. ARGENTINE, "HPLC method development for duloxetine hydrochloride using a combination of computer-based solvent strength optimization and solvent selectivity mixture design," J. Liq. Chromatogr. Relat. Technol. (1996), 19(12), 1993-2007 ISSN: 1082-6076
	90	Y. BABA, "Computer-assisted retention prediction for high performance liquid chromatography in the in-exchange mode," J. Chromatogr. (1989), 485, 143-68 ISSN: 0021-9673
	91	R. CELA, J.A. MARTINEZ, "Off-line optimization in HPLC separations," Quim. Anal. (Barcelona) (1999), 18(1), 29-40 ISSN: 0212-0569
	92	S. HATRIK, ET AL., "Use of a threshold criterion in the computer-assisted optimization of chromatographic separations," J. Chromatogr. A, (1994), 665(1), 9-15
	93	P. JANDERA, "Optimization of gradient elution in normal-phase high-performance liquid chromatography," J. Chromatogr. A (1998), 797(1 + 2), 11-22 ISSN: 0021-9673
	94	S.D. WEST, "The prediction of reversed-phase HPLC retention indexes and resolution as a function of solvent strength and selectivity," J. Chromatogr. Sci. (1987), 25(3), 122-9 ISSN: 0021-9665
	95	P. LU, H. HONGXIN, "An intelligent search method for HPLC optimization," J. Chromatogr. Sci., (1989), 27(12), 690-7 ISSN: 0021-9665
	96	R. KYSILKA, M. WURST, "Optimized determination of indole derivatives by high-performance liquid chromatography with selective detection," J. Chromatogr., (1988), 446, 315-21, ISSN: 0021-9673
	97	B. LIN, W. LIU, P. LU, D.L. MASSART, M. DESMET, B. KOPPENHOEFER, "The simulation and optimization of gradient elution HPLC," Sci. China, Ser. B (1992), 35(9), 1056-66 ISSN: 1001-652X
	98	M.A. STADALIUS, H.S. GOLD, L.R. SNYDER, "Optimization model for the gradient elution separation of peptide mixtures by reversed-phase high-performance liqid chromatography. Verification of band width relationships for acetonitrile-water mobile phases," J. Chromatogr. (1985), 327, 27-45 ISSN: 0021-9673
	99	Y. BABA, ET AL., "Effect of column temperature on high-performance liquid chromatographic behavior of inorganic polyphosphates. II. Gradient ion-exchange chromatography," J. Chromatogr. (1985), 350(1), 119-25 ISSN: 0021-9673
	100	H. ZOU, Y. ZHANG, P. LU, "The prediction of peak width at half height in HPLC," Chin. J. Chem. (1991), 9(3), 237-44
	101	N. LUNDELL, "Implementation and use of gradient predictions for optimization of reversed-phase liquid chromatography of peptides. Practical considerations," J. Chromatogr. (1993), 639(2), 97-115 ISSN: 0021-9673
	102	M. KAISER, "HPLC optimization of the separation of explosives and propellant components with an octadecyl phase by computer simulation," Propellants, Explos., Pyrotech. (1997), 22(6), 321-325 ISSN: 0721-3115

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First Named Inventor	Chester
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EXAMINER INITIALS*	Cite No.[1]	FOREIGN PATENT DOCUMENT Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T[6]

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[6]
MW	1	R.D. SMITH, E.G. CHAPMAN, AND B.W. WRIGHT, "Pressure Programming in Supercritical Fluid Chromatography," Analytical Chemistry, 57: (14) pp. 2829-2836 (1985) (NO month/day)	
MW	2	H. SNIJDERS, H.G. JANSSEN, AND C. CRAMERS, "Optimization of termperature-programmed gas chromatographic separations. 1. Prediction of retention times and peak widths from retention indices," Journal of Chromatography A, 718: (2) pp. 339-355 (Dec. 22, 1995)	
MW	3	J.C. GIDDINGS, Unified Separation Science, John Wiley & Sons, Inc. New York (1991) (NO month/day)	
MW	4	R.G. WOLCOTT, J.W. DOLAN, AND L.R. SNYDER, "Computer simulation for the convenient optimization of isocratic reversed-phase liquid chromatographic separations by varying temperature and mobile phase strength," Journal of Chromatography A, 869, pp. 3-25 (2000) (NO month/day)	
MW	5	L.R. SNYDER, J.W. DOLAN, AND J.R. GRANT, J. Chromatogr., 165, (1979) 3 (NO month/day)	
MW	6	P.J. SCHOENMAKERS, "Optimization of Chromatographic Selectivity, a Guide to Method Development," J. Chromatography Library, 35 (1986) (NO month/day) pages 1-36	
MW	7	H. MARTENS AND T. NAES, Multivariate Calibration, ISBN 0-471-90979-3, John Wiley & Sons, Ltd., Chichester (1989) (NO month/day) pp261-273, 297-356	
MW	8	R. PERSON, Special Edition Using Excel for Windows 95, QUE, Ch. 29, pp. 838-853 (No date)	

Examiner MWashburn Date Considered 4-19-06

	9	E. J. BILLO, Excel for Chemists: A Comprehensive Guide, Wiley-VCH, New York, Ch. 17, pp. 287-300 (1997) (No month)	no pg 177
	10	P. BLATTTNER ET AL., Special Edition Using Microsoft Excel 2000, QUE, Ch. 22, pp. 646-659 (1998) (No month)	
	11	L.R. SNIDER, J.J. KIRKLAND, J.L. GLAJCH, Practical HPLC Method Development, 2nd ed., Wiley, p. 392-394 and pp. 439-478 (1997) (No month)	
	12	ATWOOD AND GOLAY, J. Chromatogr., 218, pp. 97-122 (1981) (No month)	
	13	J.J. VAN DEEMTER, F.J. ZUIDERWEG, AND KLINKENBERG, Chem. Eng. Sci., 5, 271, (1956) (No month) pg 271-289	
	14	C. HORVATH AND H.J. LIN, J. Chromatogr. Sci., 149, 43, (1978) (No month) pgs 43-70.	
	15	G.J. KENNEDY, AND J.H. KNOX, J. Chromatogr. Sci., 10, 549, (1972) (No month) pgs 549-556.	
	16	B.F. KARGER, L.R. SNYDER, AND C. HORVATH, An Introduction to Separation Science, John Wiley & Sons, New York, P. 90 (1973) (No month) pgs. ix-xiii, 63, 90-95.	
	17	P.E. KAVANAGH, "Optimizing Reversed Phase Separations with the Aid of a Spreadsheet," Chromatographia, Vol. 50, No. 1/2, July, 1999, pp. 65-69 ISSN: 0009-5893	
	18	L. PAUGAM, R. MENARD, J. LAURE, D. THOUVENOT, "Optimization of glucosinolate separation by micellar electrokinetic capillary chromatography using a Doehlert's experimental design," J. Chromatography A, 864 (1999) 155-162. (No month)	
	19	E. MARENGO, M.C. GENNARO, V. GIANOTTI, E. PRENESTI, "Optimization of the separation of mono- and dichloroanilines in ion interaction high performance liquid chromatography," J. Chromatography A, 863, (1999) 1-11	(No month)
	20	A.I. LIAPIS, J.J. MEYERS, O.K. CROSSER, "Modeling and simulation of the dynamic behavior of monoliths Effects of pore structure from pore network model analysis and comparison with columns packed with porous spherical particles," J. Chromatography A, 865 (1999) 13-25 (No month)	
	21	G. DESMET, G.V. BARON, "Simultaneous optimization of the analysis time and the concentration detectability in open tubular liquid chromatography," J. Chromatography A, 867 (2000) 23-43 (No month)	
	22	S. GOGA-REMONT, S. HEINISCH, J.L. ROCCA, "Use of optimization software to determine rugged analysis conditiions in high-performance liquid chromatography," J. Chromatography A, 868 (2000) 13-29. (No month)	
	23	R. BERGES, V. SANZ-NEBOT, J. BARBOSA, "Modelling retention in liquid chromatography as a function of solvent composition and pH of the mobile phase," J. Chromatography A, 869 (2000) 27-39 (No month)	
	24	C. BARBAS, A. GARCIA, L. SAAVEDRA, M. CASTRO, "Optimization and validation of a method for the determination of caffeine, 8-chlorotheophylline and diphenhydramine by isocratic high-performance liquid chromatography Stress test for stability evaluation," J. Chromatography A, 870, (2000) 97-103. (No month)	
	25	R. ROMERO, D. GAZQUEZ, M.G. BAGUR, M. SANCHEZ-VINAS, "Optimization of chromatographic parameters for the determination of biogenic amines in wines by reversed-phase high-performance liquid chromatography," J. Chromatography A, 871 (2000) 75-83. (No month)	
	26	V. NATARAJAN, B. W. BEQUETTE, S. M. CRAMER, "Optimization of ion-exchange displacement separations I. Validation of an iterative scheme and its use as a methods development tool," J. Chromatography A, 876 (2000) 51-62. (No month)	
	27	V. NATARAJAN, S.M. CRAMER, "Optimization of ion-exchange displacement separations II. Comparison of displacement separations on various ion-exchange resins," J. Chromatography A, 876 (2000) 63-73 (No month)	
	28	V. PIETTE, M. LAMMERHOFER, K. BISCHOFF, W. LINDNER, "High-performance liquid chromatographic enantioseparation of N-protected alpha amino acids using nonporous silica modified by a quinine carbamate as chiral stationary phase," Lab of Analytical Chemistry, University of Namur, Namur, Belg. Chriality (1997), 9(2), 157-161 ISSN: 0899-0042. (No month)	
	29	N. HAMADA, H. MURAKITA, T. FUJITA, "Computer application for the optimization of resolution in HPLC," Kuromatogurafi, (1995) 16(4), 278-9 ISSN: 0917-3048. (No month) (Abstract only translated)	
	30	J.D. STUART, D.D. LISI, L.R. SNYDER, "Separation of Mixtures of o-phthalaldehyde-derivatized amino acids by reversed-phase gradient elution. Accuracy of computer simulation for predicting retention and band width," J. Chromatogr., (1989) 485, 657-72 ISSN: 0021-9673. (No month)	
	31	J.W. DOLAN, ET AL., "Simultaneous variation of temperature and gradient steepness for reversed-phase high-performance liquid chromatography method development I. Application to 14 different samples using computer simulation," J. Chromatogr. A, (1998) 803(1 + 2), 1-31 ISSN: 0021-9673 (No month)	
	32	M. LAEMMERHOFER, ET AL., "Computerized optimization of the high-performance liquid chromatographic enantioseparation of a mixture of 4-dinitrophenyl amino acids on a quinine carbamate-type chiral stationary phase using DRYLAB," J. Chromatogr. B: Biomedl. Appl. (1997) 689(1), 123-135 ISSN: 0378-4347. (No month)	
	33	T.H. DZIDO, A. SORY, "Computer optimzation for RP-HPLC separation of some nucleosides," Chem. Anal. (Warsaw) (1996), 41(1), 113-120 ISSN:0009-2223. (No month)	
	34	R. DAEPPEN, I. MOLNAR, "Application of the gradient elution technique: demonstration with a special test mixture and the DryLab G/plus method development software," J. Chromatogr. (1992), 592(1-2), 133-141 ISSN: 0021-5673. (No month)	

Examiner Joel Winkler Date Considered 4-19-06

	35	R.C. CHLOUPEK, W.S. HANCOCK, L.R. SNYDER, "Computer simulation as a tool for the rapid optimization of high-performance liqid chromatographic separation of a tryptic digest of human growth hormone," J. Chromatogr. (1992), 594(1-2), 65-73 ISSN: 0021-9673. (No mon th).	
	36	P.A. RYAN, B.A. EWELS, J.L GLAJCH, "Separation and detection of oxidation products in Neurolite raw material," J. Chromatogr. (1991), 550(1-2), 549-558 ISSN: 0021-9673. (No month).	
	37	T.H. DZIDO, E. SOCZEWINSKI, J. GUDEJ, "Computer aided optimization of high-performance liquid chromatographic analysis of flavonoids from some species of the genus Althaea," J. Chromatogr. (1991) 550(1-2), 71-6 ISSN: 0021-9673. (No month).	
	38	J. FULPER, "Practical approach for high-performance liquid chromatographic method development: assaying synthetic intermediates of a leukotrinene inhibitor," J. Chromatogr. (1989), 485, 597-605 ISSN: 0021-9673. (No month)	
	39	P.B. BOWMAN, ET AL., "Liquid chromatography solvent optimization: potential pitfalls when using a black box for developing a quality separation," J. Pharm. Biomed. Anal., (1993), 11(11-12), 1295-1301 ISSN: 0731-7085. (No month).	
	40	R. FAULSTICH, T. CATALANO, "Interactive computer optimization of high performance liquid chromatography separations in pharmaceutical analysis," LC-GC, (1991), 9(11), 776, 778-779 ISSN: 0888-9090. (No month)	
	41	P.B. BOWMAN, ET AL., "Automated HPLC optimization-not all systems are the same," J. Pharm. Biomed. Anal. (1993), 11(11-12), 1303-15 ISSN: 0731-7085. (No month)	
	42	K. OUTINEN, V.M. LEHTOLA, H. VUORELA, "Behavior of resolution by changing solvent strength and selectivity in the 'PRISMA' model using reversed-phase HPLC for biogenic amines," J. Pharm. Biomed. Anal. (1997), 15(6), 819-829 ISSN: 0731-7085. (No month)	
	43	K. OUTINEN, ET AL., "Optimization of selectivity in high-performance liquid chromatography using desirability functions and mixture designs according to prisma," Eur. J. Pharm. Sci. (1998), 6(3), 197-205 ISSN: 0928-0987. (No month).	
	44	K. OUTINEN, H. VUORELA, R. HILTUNEN, "The retention behavior of biogenic amines in the 'PRISMA' model using reversed-phase HPLC," Acta Pharm. Fenn. (1992), 101(1), 11-20 ISSN: 0356-3456. (No month).	
	45	S. NYIREDY, W. WOSNICK, H. THIELE, O. STICHER, "'PRISMA' model for computer-aided HPLC mobile phase optimization based on an automatic peak identification approach," J. Liq. Chromatogr. (1991), 14(16-17), 3077-3110 ISSN: 0148-3919. (No month).	
	46	C. GEIGER, H. RIMPLER, "'OPTISOLVE' – a PC-program for solvent optimization in liquid chromatography. Part 1," GIT Fachz. Lab. (1990), 34(11), 1391-2, 1395-7 ISSN: 0016-3538. (No month). (Summary only, Translated)	
	47	S.J. ZIEGLER, O. STICHER, "Optimization of the mobile phase for HPLC separation of S-alk(en)yl-L-cysteine derivataives and their corresponding sulfoxide isomers," J. Liq. Chromatogr. (1989), 12(1-2), 199-220 ISSN: 0148-3919. (No month).	
	48	R. CELA, ET AL., "PREOPT-W: off-line optimization of binary gradient separations in HPLC by simulation – IV. Phase 3," Comput. Chem. (1996), 20(3), 315-330 ISSN: 0097-8485. (No month).	
	49	R. CELA, M. LORES, "PREOPT-W: a simulation program for off-line optimization of binary gradient separations in HPLC – II. Data management and miscellaneous aspects of use," Comput. Chem. (1996), 20(2), 193-202 ISSN: 0097-8485. (No month)	
	50	R. CELA, ET AL., "The PREOPT package for pre-optimization of gradient elutions in high-performance liquid chromatography," Anal. Chim. Acta (1986), 191, 283-297 ISSN: 0003-2670. (No month).	
	51	R. CELA, M. LORES, "PREOPT-W: a simulation program for off-line optimization of binary gradient separations in HPLC – I. Fundamentals and overview," Comput. Chem. (1996), 20(2), 175-91 ISSN: 0097-8485, (No month).	
	52	S.D. PATTERSON, "Use of solvent selectivity optimization procedures for high-performance liquid chromatographic method development," J. Chromatogr. (1992), 592(1-2), 43-9 ISSN: 0021-9673, (No month).	
	53	M. SOLFRIZZO, ET AL., "Separation of chlamydosporol epimers by reversed-phase HPLC using commercial solvent optimization software," Chromatographia, (1994) 39(7/8), 443-7 ISSN: 0009-5893. (No month)	
	54	G. D'AGOSTINO, ET AL., "Optimization of the mobile phase composition in gradient elution reversed-phase HPLC by stochastic prediction," Chromatographia, (1988) 25(4), 343-9 ISSN: 0009-5893. (No month).	
	55	K. LEMR, "Computerized optimization of the mobile phase in RP-HPLC," Chem. Listy (1992), 86(11), 850-4 ISSN: 0009-2770 (No month) (Only paragraph Translated)	
	56	P. JAGELAND, ET AL., "Optimization of industrial-scale high-performance liquid chromatography applications using a newly developed software," J. Chromatogr. (1994), 658(2), 497-504 ISSN: 0021-9673. (No month).	
	57	C. BRYANT, ET AL., "Using inductive logic programming to discover knowledge hidden in chemical data," Chemom. Intell. Lab. Syst. (1997), 36(2), 111-123 ISSN: 0169-7439. (No month)	
	58	S. HEINISCH, ET AL., "Computerized optimization of RP-HPLC separation with nonaqueous or partially aqueous mobile phases," Chromatographia, (1997), 44 (9/10), 529-537 ISSN: 0009-5893. (No month)	
	59	B. BOURGUIGNON, ET AL., "CRISEBOOK, a Hypermedia version of an expert system for the selection of optimization criteria in high-performance liquid chromatography," J. Chromatogr. (1992), 592(1-2), 51-7 ISSN: 0021-9673. (No month)	

Examiner Hal Wachsman Date considered 4-19-06

	60	J. MARTINEZ-VIDAL, ET AL., "A new sequential procedure for the efficient and automated location of optimum conditions in high performance liquid chromatography (HPLC)." J. Liq. Chromatogr., (1995), 18(15), 2969-89 ISSN: 0148-3919. (No month)	
	61	C.T. MANT, ET AL., "Reversed-phase chromatographic method development for peptide separations using the computer simulation program ProDigest-LC." J. Chromatogr., (1989), 485, 365-82 ISSN: 0021-9673. (No month)	
	62	R.S. HODGES, ET AL., "Computer simulation of high-performance liquid chromatographic separations of peptide and protein digests for development of size-exclusion, ion-exchange, and reversed-phase chromatographic methods." J. Chromatogr., (1988), 458, 147-67 ISSN: 0021-9673. (No month)	
	63	S.G. LISSETER, "A PASCAL program for the optimization of ternary mobile phases for reversed-phase high performance liquid chromatography." Lab. Microcomput. (1990), 9(4), 109-15 ISSN: 0262-2955. (No month)	
	64	J. WEI, J. WEI, X. ZHOU, "Computer-aided optimization of the experimental conditions for the isocratic reversed-phase high-performance liquid chromatographic separation of hormonal steroids." J. Chromatogr. (1991), 552(1-2), 103-11 ISSN: 0021-9673. (No month)	
	65	J. WEI, J. WEI, X. ZHOU, "Optimization of an isocratic reversed phase liquid chromatographic system for the separation of fourteen steroids using factorial design and computer simulation." Biomed. Chromatogr. (1990), 4(1), 34-8 ISSN: 0269-3879. (No month)	
	66	A.G. WRIGHT, A.F. FELL, J.C. BERRIDGE, "Computer-aided optimization with photodiode array detection in HPLC." Anal. Proc. (London) (1988), 25(9), 300-3 ISSN: 0144-557X. (No month)	
	67	T. O'DWYER, P. DELAND, R. SMITH, "Optimization of HPLC separations through distributed intelligence using a PC." Am. Lab. (Fairfield, Conn.) (1988), 20(6), 40, 42-4, 46-8, ISSN: 0044-7749. (No month)	
	68	A.G. WRIGHT, A.F. FELL, J.C. BERRIDGE, "Sequential simplex optimization and multichannel detection in HPLC: application to method development." Chromatographia, (1987), 24, 533-40, ISSN: 0009-5893. (No month)	
	69	R. ANDERSSON, M.D. HAEMAELAEINEN, "Simplex focusing of retention times and latent variable projections of chromatographic profiles." Chemom. Intell. Lab. Syst. (1994), 22(1), 49-61 ISSN: 0169-7439. (No month)	
	70	A.G. WRIGHT, A.F. FELL, J.C. BERRIDGE, "Strategies for automated optimization of high-performance liquid chromatographic separations incorporating diode-array detection." J. Chromatogr. (1988), 458, 335-53 ISSN: 0021-9673	
	71	O. BUSTO, J.C. OLUCHA, F. BORRULL, "Determination of phenolic compounds in water by HPLC by linear gradient. An optimized method.." Chromatographia, (1991), 32(9-10), 423-8 ISSN: 0009-5893. (No month)	
	72	R.P. TUCKER, ET AL., "Computer-aided models for optimization of eluent parameters in chiral liquid chromatography." Chirality, (1992) 4(5), 316-22 ISSN: 0899-0042. (No month)	
	73	H. J. METTING, P. M. COENEGRACHT, M. J. PIERRE, "Neural networks in high-performance liquid chromatography optimization: response surface modeling." J. Chromatogr. A, (1996), 728(1 + 2), 47-53 ISSN: 0021-9673. (No month)	
	74	E.P. LANKMAYR, ET AL., "Computer-aided optimization of high-performance liquid chromatography in the pharmaceutical industry." J. Chromatogr. (1989), 485, 183-93 ISSN: 0021-9673. (No month)	
	75	C. P. ONG, ET AL., "Use of overlapping resolution mapping scheme for optimization of the high-performance liquid chromatographic separation of pharmaceuticals." J. Chromatogr. A, (1995), 692(1 + 2), 207-12. (No month)	
	~~76~~	~~G. FAN, ET AL., "Optimization of reversed-phase liquid chromatographic separation of aromatic acids." Sepu (1988), 6(4), 220-2~~	
	77	O.A. QUATTROCCHI, L. IMPERIALE, "Optimization of HPLC methods." SAFYBI (1991), 31(84), 37-60 ISSN: 0558-1265. (No month) Only Abstract Translated	
	~~78~~	~~W. YUAN, ET AL., "An automatic optimization procedure in multistage gradient elution." Sepu (1985), 3(6), 335-8~~	
	~~79~~	~~C. ZHOU, ET AL., "Optimization of the composition of a binary mobile phase in RP-HPLC by computer statistical mapping procedure." Fenxi Geshi Tongbao (1990), 9(2), 52-6, ISSN: 1000-3800~~	
	80	D. BYLUND, ET AL., "Optimization of chromatographic separations by use of a chromatographic response function, empirical modeling, and multivariate analysis." Chromatographia, (1997), 44(1/2), 74-80 ISSN: 0009-5893. (No month)	
	~~81~~	~~H. MO, B. DENG, "Optimization of separation conditions for mixtures of phenols by high-performance liquid chromatography using artificial neural network." Fenxi Huaxue (1995), 23(7), 779-82 ISSN: 0253-3820~~	
	~~82~~	~~R. LYNCH, ET AL., "Solvent optimization system for HPLC applications." LaborPraxis (1990), 14(12), 1028-1030-2 ISSN: 0344-1733. (No month)~~	
	83	F. GONG, ET AL., "An improved algorithm of sequential number-theoretic optimization (SNTO) based on clustering technique." Chemom. Intell. Lab. Syst. (1999), 45(1,2), 339-346 ISSN: 0169-7439. (No month)	
	84	P. CHAMINADE, ET AL., "Use of the cubic spline interpolation algorithm for the selection of optimal ternary mobile phase composition in RP-HPLC." Analusis (1994) 22(2), 55-7 ISSN: 0365-4877. (No month)	
	85	B. BOURGUIGNON, ET AL., "Optimization in irregularly shaped regions: pH and solvent strength in reversed-phase high-performance liquid chromatography separations." Anal. Chem. (1994), 66(6), 893-904 ISSN: 0003-2700. (No month)	

Examiner [signature] Date Considered 4-20-00

	86	P.F. DE AGUIAR, ET AL., "Comparison of models and designs for optimization of the pH and solvent strength in HPLC," Anal. Chim. Acta, (1997) 356(1), 7-18 ISSN: 0003-2670. (No month)	
	87	C. GERTZ, W. FELLMANN, "Simple procedure for optimizing multicomponent mobile phases in high-performance liquid chromatography," Fresenius' Z. Anal. Chem. (1986) 323(4), 343-9 ISSN: 0016-1152, (No month) Only Abstract Rec'd 1/16/07	
	88	Q. WANG, R. GAO, B. YAN, "Integration of computer-assisted statistical scanning optimization system in HPLC," Chin. J. Chem. (1996), 14(1) 40-7 ISSN: 1001-604X, (No month)	
	89	B.A. OLSEN, M.D. ARGENTINE, "HPLC method development for duloxetine hydrochloride using a combination of computer-based solvent strength optimization and solvent selectivity mixture design," J. Liq. Chromatogr. Relat. Technol. (1996), 19(12), 1993-2007 ISSN: 1082-6076, (No month)	
	90	Y. BABA, "Computer-assisted retention prediction for high performance liquid chromatography in the ion-exchange mode," J. Chromatogr. (1989), 485, 143-68 ISSN: 0021-9673, (No month)	
	91	R. CELA, J.A. MARTINEZ, "Off-line optimization in HPLC separations," Quim. Anal. (Barcelona) (1999), 18(1), 29-40 ISSN: 0212-0569, (No month)	
	92	S. HATRIK, ET AL., "Use of a threshold criterion in the computer-assisted optimization of chromatographic separations," J. Chromatogr. A (1994), 665(1), 9-15, (No month)	
	93	P. JANDERA, "Optimization of gradient elution in normal-phase high-performance liquid chromatography," J. Chromatogr. A (1998), 797(1 + 2), 11-22 ISSN: 0021-9673, (No month)	
	94	S.D. WEST, "The prediction of reversed-phase HPLC retention indexes and resolution as a function of solvent strength and selectivity," J. Chromatogr. Sci. (1987), 25(3), 122-9 ISSN: 0021-9665, (No month)	
	95	P. LU, H. HONGXIN, "An intelligent search method for HPLC optimization," J. Chromatogr. Sci., (1989), 27(12), 690-7 ISSN: 0021-9665 (No month)	
	96	R. KYSILKA, M. WURST, "Optimized determination of indole derivatives by high-performance liquid chromatography with selective detection," J. Chromatogr., (1988), 446, 315-21, ISSN: 0021-9673, (No month)	
	97	B. LIN, W. LIU, P. LU, D.L. MASSART, M. DESMET, B. KOPPENHOEFER, "The simulation and optimization of gradient elution HPLC," Sci. China, Ser. B (1992), 35(9), 1056-66 ISSN: 1001-652X, (No month)	
	98	M.A. STADALIUS, H.S. GOLD, L.R. SNYDER, "Optimization model for the gradient elution separation of peptide mixtures by reversed-phase high-performance liqid chromatography. Verification of band width relationships for acetonitrile-water mobile phases," J. Chromatogr. (1985), 327, 27-45 ISSN: 0021-9673, (No month)	
	99	Y. BABA, ET AL., "Effect of column temperature on high-performance liquid chromatographic behavior of inorganic polyphosphates. II. Gradient ion-exchange chromatography," J. Chromatogr. (1985), 350(1), 119-25 ISSN: 0021-9673, (No month)	
	100	H. ZOU, Y. ZHANG, P. LU, "The prediction of peak width at half height in HPLC," Chin. J. Chem. (1991), 9(3), 237-44, (No month)	
	101	N. LUNDELL, "Implementation and use of gradient predictions for optimization of reversed-phase liquid chromatography of peptides. Practical considerations," J. Chromatogr. (1993), 639(2), 97-115 ISSN: 0021-9673 (No month)	
	102	M. KAISER, "HPLC optimization of the separation of explosives and propellant components with an octadecyl phase by computer simulation," Propellants, Explos., Pyrotech. (1997), 22(6), 321-325 ISSN: 0721-3115, (No month)	

EXAMINER	DATE CONSIDERED
Hal Van Gunn	4-20-06

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